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EXAMINER

YE, LIN

ART UNIT PAPER NUMBER

2615

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/626,568

Applicant(s)

AAGAARD ET AL

Examiner

Lin Ye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-2, 4-6 and 11-16 filed on 9/13/04 have been considered but are moot in view of the new ground(s) of rejection.
2. Applicant's arguments filed 9/13/04 have been fully considered but they are not persuasive as to claims 7-10.

For claim 7-10, the applicants have states that “applicant have amended **each of the independent claims** in order to more particularly point out the difference between the claimed invention and the cited references” (See REMARKS page 7, lines 22-24). However, the applicants do not amend **the independent claim 7**; and applicants also argue that the Yuen reference (U.S. 2002/0005902) describes a camera-based security system and is not directed to a video imaging system. The examiner disagrees. The Yuen reference clear states the system has multiple **video cameras** are used to automatically **record sports events** and other programming (See Yuen reference, page 1, [0002]). It should be noted that a video camera-based security system is also considered as a video imaging system. For those reasons, the claims 7-10 will be rejected as set in the previous Office Action.

Claim Rejections – 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Paff U.S. Patent 5,164,827.

Referring to claim 1, the Paff reference discloses in Figures 1 and 6, a video imaging system (video surveillance camera system 100, see Col. 3, lines 16-22), the system comprising: a master video camera (MD, see Col. 3, lines 23-25) for producing video images of a moving object of interest (e.g., the master video camera follows a moving Subject (S) as shown in Figure 2, see Col.6, lines 1-2 and Col. 7, lines 40-45); a plurality of additional video cameras (slave cameras SD1-SD5) each positioned at a different location for producing additional video images of the object of interest from different spatial perspectives as shown in Figure 1 (See Col. 4, lines 10-17); a control system (controller 10 and a monitor station 11) for controlling said additional video cameras (SD1-SD5) in response to the master video camera (MD) to follow movement of the object of interest (S) (See Col. 7, lines 37-49), wherein said control system includes a means for controlling the focal length (zooming and focus status) of each additional camera such that size of the moving object of interest is generally equal in each of the master and additional cameras (e.g., the slave camera SD1-S5 responsive to the information relating to the zooming status of the master camera MD, can then adjust their own zooming states or conditions so that the subject is viewed at approximately **the same magnification** as with the master camera MD, see Col. 8, lines 1-6); a recording system (monitor station 11) for recording the video images produced by the

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master camera and the additional cameras; and a user interface (joy sticky 11b and monitors 11A-D) for selecting particular ones of the video images for display (e.g., station 11 automatically removes the video of the out-of-range slave camera, or select and switching the video of the in range of slave camera for display on the monitors 11A-D, see Col. 7, lines 40-65), wherein said user interface includes a control to select successive additional camera images to effectuate a partial rotation around the object of interest in the display such that size of the object of interest remains generally equal throughout the rotation through successive additional camera images as shown in Figures 2 and 4 (See Col. 8, lines 16-22).

Referring to claim 2, the Paff reference discloses a monitoring unit (monitoring station 11) for transmitting signals representative of an operating status of the master camera (MD) to the control system (controller 10); and a plurality of positioning units (pan, tilt, focus and zoom motors 13-16) for positioning the additional cameras (SD1-SD5) in response to control signals from the control system (See Col. 4, lines 23-35).

Referring to claim 5, the Paff reference discloses wherein the control system (10) comprises: a pan control, a tilt control, a focus control and a frame control (e.g., a master camera captures a frame image that has a coordinate position of subject, the control system 10 calculates the coordinate position of subject S relative to the master camera, see Col. 6, lines 5-10, and Col. 6, lines 39-55) for each of the additional video cameras (See Col. 7, lines 27-33, Col. 8, lines 1-15); and a computer processor for coordinating operation of the pan control, the tilt control the focus control and the frame control for each additional video camera in response position and focus parameters of the master video camera (See Col. 7, lines 49).

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Referring to claim 14, the Paff reference discloses wherein said successive additional camera images displayed during said rotation were all captured at the same time on the monitors (11A-D).

Referring to claim 15, the Paff reference discloses wherein said successive additional camera images displayed during said rotation were captured sequentially in time (e.g., each of images corresponding to the moving of the subject S in the video signals captured by cameras are sequentially displayed in time on the monitors 11A-D).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Yuen U.S. Publication 2002/0005902.

Referring to claim 7, the Yuen reference discloses in Figure 1, a method of generating a video image, said method comprising the steps of: producing a master video image of a moving object (100) of interest (master video camera 104 operating in wide-angle, see [0013]); producing additional video images of the object of interest from different spatial perspectives (video cameras 108 and 112); and controlling characteristics of said additional video images in response to the master video image to track the object of interest (e.g., the master camera 104 may pan, tilt or zoom depend on if the field of view and resolution of

master camera 104 are sufficient to follow the interest target 100 as it moves from place to place for determining the target 100 in three-dimensional space; and at least one additional camera operates in a pan/tilt/zoom-in mode relative to the master camera. See [0015]).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paff U.S. Patent 5,164,827 in view of McClintock U.S. Patent 5,598,208.

Referring to claim 4, the Paff reference discloses all subject matter as discussed in respected claim 1, except that the Paff reference does not explicitly show the user interface permits the sequential selection of individual frames in the video images.

The McClintock reference discloses in Figures 1-4, a video camera recording system has a plurality of video cameras (22) and a user interface (input controller 70) for selecting particular ones of the video images for display (See Col. 6, lines 18-22); and the user interface permits the sequential selection of individual frames in the video images (See Col. 5, lines 52-65). The McClintock reference is evidence to one of ordinary skill in the art at the time to see more advantage for the video camera recording system including a user

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interface so that the viewer has more flexible option for selecting particular ones of the video images and permits the sequential selection of individual frames in the video images for display as he/she wishes review. For that reason, it would have been obvious to the one of ordinary skill in the art at the time to modify the video camera system of Paff for providing a user interface permits the sequential selection of individual frames in the video images as taught by McClintock.

Referring to claim 11, the Paff and McClintock references disclose all subject matter as discussed with respect to same comment as with claims 1 and 4.

Referring to claim 12, the Paff and McClintock references disclose all subject matter as discussed with respect to same comment as with claims 1 and 4, and the Paff reference discloses displaying another one of the plurality of video images (e.g., any of monitors 11A-D can be selected to display another one of the plurality of video images).

Referring to claim 13, the Paff and McClintock references disclose all subject matter as discussed with respect to same comment as with claims 1 and 4.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paff U.S. Patent 5,164,827 in view of Hayashi et al. U.S. Patent 6,160,544.

Referring to claim 6, the Paff reference discloses all subject matter as discussed in respect to claim 1, except that the reference does not explicitly show each of the additional cameras also comprising a microphone for supplying signals representative of audio signals received by the microphones to the control system.

The Hayashi reference disclose in Figure 2, a video camera system comprising a plurality of cameras that have microphones; and video signals (containing audio signals picked up by the microphones) from the cameras that are directly supplied to video distributors (See Col. 4, lines 22-31). The Hayashi reference is evidence the one of ordinary skill in the art at the time to see more advantage for the video camera has a microphone build in so that the user can recording both image and audio signal together and transmitter to remote system for reviewing late. For that reason, it would have been obvious the one of ordinary skill in the art at the time to see each of the additional cameras also comprising a microphone for supplying signals representative of audio signals received by the microphones to the control system disclosed by Paff.

10. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen U.S.

Publication 2002/0005902 in view of McClintock U.S. Patent 5,598,208.

Referring to claim 8, the Yuen references discloses all subject matter as discussed in respected claim 7, and a recording system for recording the video images produced by the master camera and the additional cameras (See [0016]). However, the reference does not explicitly shows a user interface for selecting particular ones of the video images for display.

The McClintock reference discloses in Figures 1-4, a video camera recording system has a plurality of video cameras (22) and a user interface (input con troll 70) for selecting particular ones of the video images for display (See Col. 6, lines 18-22). The McClintock reference is evidence the one of ordinary skill in the art at the time to see more advantage for the video camera recording system including a user interface so that the viewer has more flexible option for selecting particular ones of the video images for display as he/she wishes

review. For that reason, it would have been obvious to see the camera system having a user interface for selecting particular ones of the video images for display disclosed by Yuen.

Referring to claim 9, the McClintock reference discloses wherein the user interface permits the sequential selection of individual frames in the video images (See Col. 5, lines 52-65).

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen U.S.

Publication 2002/0005902 in view of Hayashi et al. U.S. Patent 6,160,544 and McClintock U.S. Patent 5,598,208.

Referring to claim 10, the Yuen references discloses all subject matter as discussed in respected claim 7, except the Yuen reference does not explicitly show producing signals representative of audio signals received at selected ones of the different spatial perspectives.

The Hayashi reference disclose in Figure 2, a video camera system comprising a plurality of cameras that have microphones; and video signals (containing audio signals picked up by the microphones) from the cameras that are directly supplied to video distributors (See Col. 4, lines 22-31). The Hayashi reference is evidence the one of ordinary skill in the art at the time to see more advantage for the video camera has a microphone build in so that the user can recording both **image and audio signal together** and transmitter to remote system for reviewing late.

The McClintock reference discloses in Figures 1-4, a video camera recording system has a plurality of video cameras (22) and a user interface (input con troll 70) for **selecting** particular ones of the video images for display (See Col. 6, lines 18-22). The McClintock reference is evidence the one of ordinary skill in the art at the time to see more advantage for

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the video camera recording system including a user interface so that the viewer has more flexible option for selecting particular ones of the video images for display as he/she wishes review.

For that reason, it would have been obvious the one of ordinary skill in the art at the time to modify the video camera system of Yuen for producing signals representative of audio signals received at selected ones of the different spatial perspectives as taught by Hayshi and McClintock.

12. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paff U.S. Patent 5,164,827 in view of Hayashi et al. U.S. Patent 6,160,544 and Inanaga et al. U.S. Patent 5,590,094.

Referring to claim 16, the Paff and Hayashi references disclose all subject matter as discussed in respected claim 1, except that the references do not explicitly show the control system assigns a delay to each of said sounds signals to account for the relative distance between each microphone and the object of interest.

The Inanaga reference teaches in Figures 1 and 5, a sound controlling and reproducing system assigns a delay (by signal delaying circuit 118, See Col. 10, lines 1-2) to each of the sounds signals to account for the relative distance between each microphone (microphones 11-15) and the object of interest (e.g. the system has a sound location detection apparatus 21-22 based on the relative distance between each microphone and the object of interest to output the position signal, and delay times of audio signals read out by the reading out means in order to produce an actual audio image in accordance with the positron signals (See Col. 2, lines 1-7). The Inanaga reference is evidence the one of ordinary skill in the art at the time

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to see more advantage for the control system assigns a delay to each of the sounds signals to account for the relative distance between the microphone and the object of interest so that an actual audio image can be reproduced taking such edition and reproduction of sounds form a plurality of sound sources into consideration (See col. 5, lines 30-34). For that reason, it would have been obvious to the one of ordinary sill in the art at the time to modify the video camera system of Paff for providing the control system to assign a delay to each of the sounds signals to account for the relative distance between each microphone and the object of interest to obtain the actual audio image as taught by Inanaga.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (703) 305-3250. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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SUPERVISORY PATENT EXAMINER
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Lin Ye
January 19, 2005